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**Young Adult Offspring of Substance Abusers:
Is Adjustment Related to Mental Health of Parents
or Exposure to Abuse/Neglect?**

by

Margit Cox Henderson

**A Thesis Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Master of Arts**

January

1993

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CHAPTER I

INTRODUCTION AND REVIEW OF RELATED LITERATURE

Approximately 12.5% of Americans (one out of every eight) are children of problem drinkers, and about 76.9% of them are aged 18 or older (Russell, Henderson & Blume, 1985). Although adult offspring of substance abusers (OSAs) are generally thought to be more disturbed than offspring of parents without substance-abuse problems, in general, studies of the personality characteristics of OSAs have reported mixed results.

Some studies of offspring of substance abusers have investigated affective variables, and have found OSAs to be more anxious, neurotic and prone to depression than their non-OSA peers (Benson & Heller, 1987; Black, Bucky & Wilder-Padilla, 1986; Clair & Genest, 1987; Elliott & Edwards, 1991; Sher, Walitzer, Wood & Brent, 1991; Tweed & Ryff, 1991). Furthermore, Black et al (1986) found that OSAs have more difficulty identifying and expressing their feelings than do non-OSAs. Other studies, however, have reported contrasting results (e.g., Duprez, 1987; McLauchlin, Walderman & Thomas, 1973; Sher et al., 1991). For example, Duprez (1987) found no differences between OSAs and non-OSAs on the Beck Depression Inventory.

Studies of OSAs that examined self-concept variables also have reached inconsistent conclusions. Some researchers have reported that offspring of substance abusers have lower self-

esteem (DiCicco, Davis & Orenstein, 1984; McLauchlin, et al., 1973; Sher et al., 1991) and a more external locus of control (Clair & Genest, 1987; DiCicco, et al., 1984) than their non-OSA peers, while others have found no differences (Churchill, Broida & Nicholson, 1990; Duprez, 1987; Tweed & Ryff, 1991; Werner & Broida, 1991). In their study of 497 students, Churchill et al. (1990) found no significant relationship between parental substance abuse and either self-esteem or locus of control.

Finally, studies of OSAs' interpersonal relationships have obtained mixed results also. Elliot and Edwards (1991) found that adult daughters of substance abusers are more likely to divorce than adult daughters of parents without substance-abuse problems. Latty-Mann and Davis (1988) and Brennan, Shaver and Tobey (1991) examined the attachment styles of OSAs and have found their attachment styles to be similar to Crittenden's (1988) "A/C" category¹ which includes both avoidant and anxious-ambivalent qualities. Also, OSAs have reported more difficulty trusting others and more problems with intimacy than non-OSAs (Black et al., 1986; Latham, 1988). However, contrasting results from studies by Hunt (1989), McCarthy-Woods (1988), and Tweed and Ryff (1991) indicated no significant differences in intimacy between OSAs and

¹The term "A/C" is based on the classification system of Ainsworth, Blehar, Walters and Wall (1978): A and C are non-evaluative terms for Hazan and Shaver's (1987) avoidant and anxious-ambivalent types, respectively.

non-OSAs. Furthermore, OSAs have been found to be no different from their non-OSA peers in their sociability, other-directedness and need for social support (Berkowitz & Perkins, 1988).

Methodological Factors

Differences and/or problems in methodology may account for some of the discrepancies among results of different studies regarding personality characteristics of OSAs. For example, many of the studies which have found OSAs to be more disturbed than non-OSAs have sampled OSAs from treatment settings (Heller, Sher & Benson, 1982). Not all children of substance abusing parents develop serious coping problems (Clair & Genest, 1987; Werner, 1986); however, research has shown that better-adjusted OSAs are under-represented in treatment-seeking populations (Baxter, 1989; Hedderick, 1989; Kashubeck & Christensen, 1991). For example, Baxter (1989) found that offspring of substance abusers sampled from a clinical setting were significantly more depressed than were non-clinical OSAs and non-OSAs. Therefore, differences in sampling procedures may account for some of the differences in findings between various studies of OSAs. More representative samples would include OSAs who have been/are in treatment as well as those who have not been in treatment.

Another reason for the difficulty in finding clear descriptions of personality characteristics of adult offspring of substance abusers may be that studies of OSAs generally compare them to non-OSAs, rather than to adult offspring of psychologically healthy parents. When no distinction is made in non-OSA groups between

adult offspring of mentally healthy parents and adult offspring of parents with other psychiatric problems, it is possible that differences which really do exist between OSAs and adult offspring of parents without psychiatric problems go unobserved. A better understanding of the effects of parental substance abuse would be gained by using two control groups: one consisting of adult offspring of parents with other psychiatric problems (psychiatric controls) and the other of adult offspring of parents without psychiatric problems ("normal" controls). This design would allow the distinction to be made between characteristics which are common to adult offspring of parents with any type of psychological disorder and those characteristics which are specific to adult offspring of substance abusers (Hunt, 1989; West & Prinz, 1987).

Few studies have used this type of design. Benson and Heller (1987) compared daughters of normal fathers, substance-abusing fathers and psychologically-disturbed fathers on neuroticism, acting-out and depression. They found that daughters of substance-abusing fathers and daughters of psychologically-disturbed fathers presented significantly more neurotic and acting-out symptoms than daughters of normal fathers, and that daughters of psychologically-disturbed fathers had significantly more symptoms of depression than daughters of substance-abusing fathers and daughters of normal fathers. Similarly, Elliott and Edwards (1991) examined a sample of professional women and compared daughters of mentally-ill parents, daughters of substance-abusing parents and daughters of normal parents. Their findings suggest that daughters of substance-

abusing parents and mentally-ill parents experience more disruption in their interpersonal relationships and more psychological distress than do daughters of normal parents. Also, they found that daughters of substance-abusing parents felt greater interpersonal discomfort than did daughters of mentally-ill parents. Based on the findings of these studies, it was predicted in the current study that offspring of normal parents would be better adjusted than offspring of substance-abusing parents and offspring of parents with other psychological problems; furthermore, it was hypothesized that there would be some differences in adjustment between the latter two groups.

A problem associated with defining psychiatric comparison groups in studies of offspring of substance abusers is the comorbidity of substance abuse and other forms of psychopathology (Benson & Heller, 1987; Heller et al., 1982). In order to make cleaner comparisons between offspring of substance-abusing parents and offspring of parents with other psychological problems, offspring who have been exposed to both substance abuse and another psychological problem must be addressed separately. Some studies (e.g., Elliott & Edwards, 1991) have dealt with this problem by dropping subjects whose parents were mentally ill and abused substances. In contrast, the design of the current study included these subjects as a distinct group (i.e., the comorbid group).¹

¹The comorbid group in this study included subjects with a dually-diagnosed (substance abuse and mental illness) parent as well as

Family Environment Variables

A recent trend in the literature about offspring of substance abusers has provided evidence that adult adjustment is more strongly related to family environment than to parental substance abuse per se (Baxter, 1989; Benson & Heller, 1987; Black & Mayer, 1980; Elliott & Edwards, 1991; Werner & Broida, 1991). Reviews of the literature on OSAs (Heller et al., 1982; Russell et al., 1985; West & Prinz, 1987) have stressed the importance of examining factors correlated with substance abuse, stating that the "problems of offspring may be due to these concomitants of alcoholism rather than to alcoholism itself" (Heller et al., 1982, p. 185). Results of Werner and Broida's (1991) study support this suggestion. The study utilized a 2 x 2 factorial design to examine the independent influences of parental alcoholism and familial dysfunction,¹ and found that self-esteem was significantly related to familial dysfunction and not to parental alcoholism.

Child abuse and neglect has also been found to be more common in families with a substance-abusing parent (Black et al., 1986;

subjects with one parent who abused drugs/alcohol and another who was mentally ill. This group is also referred to as the dual diagnosis group.

¹ Familial dysfunction was assessed using the Moos Family Environment Scale (Moos & Moos, 1981), and was defined in terms of degree of conflict, cohesion, expressiveness, independence and achievement orientation.

Elliott & Edwards, 1991; Lawson & Wilson, 1980; McCarthy-Woods, 1988; Sowder & Burt, 1980; Woodside, 1991). Effects of child abuse/neglect include low self-esteem, more negative affect, impulsivity, as well as avoidant and anxious attachment (Cicchetti & Olsen, 1990; Gelardo & Sanford, 1987). Although child abuse/neglect is known to influence later adjustment, few studies have examined both abuse/neglect and parental substance abuse (Russell et al., 1985). One such study (Elliott & Edwards, 1991) found that the main effect of parental dysfunction (i.e., parental alcoholism or mental illness) on current level of trauma-related psychological distress dropped out when the effect of sexual and physical abuse was controlled. These findings highlight the importance of separating the influences of parental alcoholism from the effects of other related factors. It was hypothesized that subjects who have been exposed to abuse/neglect will be more disturbed than those who have not been exposed to abuse/neglect. Furthermore, based on the findings of Elliott and Edwards (1991), exposure to abuse/neglect was hypothesized to be more strongly related to disturbance than parental substance abuse or mental illness.

Current Study

In the present study, subjects were separated into groups according to parental mental health: no known psychological problems, substance abuse, another psychological problem(s), and dual diagnosis. In addition, subjects were grouped according to whether or not they had been exposed to abuse and/or neglect. By using a 4 x 2 natural groups factorial design (parental mental health

X exposure to abuse/neglect), it was possible to investigate the combined and independent influences of these two factors on adult personality functioning.

The majority of the personality variables examined in this study fell into three conceptually-related groups: affective variables, self-concept variables and interpersonal variables. The affective variables, including depression-proneness, neuroticism and alexithymia (a cognitive-affective dimension characterized by extreme trouble with knowing and verbally expressing feelings), were assessed to test the notion that offspring of substance abusers have difficulty dealing with emotions (e.g., Black et al, 1986), and to further clarify previous findings (Black et al, 1986; Benson & Heller, 1987; Berkowitz & Perkins, 1988; Clair & Genest, 1987; Duprez, 1987; Elliott & Edwards, 1991; McLauchlin et al., 1973; Sher et al., 1991).

The self-concept variables: self-esteem, self-concept and locus of control, were included in order clarify the findings of DiCicco et al. (1984), McLauchlin et al. (1973), Clair and Genest (1987), Churchill et al. (1990), and Werner and Broida (1991). The clinical picture of offspring of substance abusers suggests that they have lower self-esteem, poorer self-concepts and an external locus of control. In addition, self-monitoring was assessed to examine the suggestion that OSAs are more self-conscious than non-OSAs.

The interpersonal variables, attachment style, need for social support, directiveness, sociability, extroversion and independence, were examined in order to extend the results of Latty-Mann and

Davis (1988), Brennan et al. (1991) and Berkowitz and Perkins (1988). A/C attachment (the combination of avoidant and anxious-ambivalent attachment styles) has been shown to be related to having a disturbed or abusive caretaker in infancy (Crittenden, 1988); based on this finding, OSAs have been hypothesized to be at higher risk of developing A/C attachment (Latty-Mann & Davis, 1988). Also, OSAs may become more self-reliant/independent out of necessity if they are unable to depend on their parents. Offspring of substance abusers are not expected to differ from their peers in their need for social support, directiveness, extroversion and sociability based on the findings of Berkowitz and Perkins (1988).

Finally, impulsivity was examined in order to replicate and extend previous findings (Berkowitz & Perkins, 1988; Sher et al., 1991). Impulsivity was analyzed separately, as it did not fit into any of the conceptually-related groups of variables described above. Behavioral undercontrol has been hypothesized to be related to substance abuse, and OSAs have been shown to have a predisposition for substance abuse problems (Sher et al., 1991); thus, impulsivity may be a characteristic of OSAs.

In summary, the purpose of this study was to attempt to separate the influences of parental substance abuse, parental mental illness in general, and exposure to abuse/neglect with the hope of shedding some light onto the currently confused body of literature about personality characteristics of offspring of substance abusers.

CHAPTER II

METHOD

Subjects

Subjects were 387 Loyola University undergraduates who were recruited to participate in a one-hour study for course credit or pay. The mean age of the subjects was 20 years old ($SD = 3.81$); 69% were female; and 67% were white. Twenty percent of the subjects indicated that they had either sought professional psychological help or had participated in a support group.

Subjects were grouped according to whether they reported having a substance-abusing parent, a parent with another psychological problem(s), a parent who both abused substances and had another psychological problem(s), or parents without known psychological or substance abuse problems. In addition, subjects were grouped according to whether or not they reported having been exposed to abuse/neglect. Table 1 displays the percentages of subjects who indicated that their parents had a substance abuse problem and/or other psychological problems. Table 2 presents the percentages of subjects who indicated that they had been exposed to various forms of abuse or neglect.

Design

A 4 x 2 natural groups design (parental mental health X exposure to abuse/neglect) was used to investigate the personality

Table 1

Percentages of Subjects who Indicated that their Parents Had
Various Psychological Problems

	Mother	Father
Psychological Problem		
Substance Abuse	6.0	21.3
Major Depression (feeling very sad for at least two weeks)	25.6	11.1
Mania (feeling a surge of energy and excited mood which lasts for at least two weeks)	3.1	3.4
Generalized Anxiety Disorder (feeling very anxious or nervous for an extended period of time)	11.4	7.8
Phobia (a specific fear which interferes with daily life)	4.7	3.6
Obsessive-Compulsive Disorder (a specific thought or behavior repeated over and over which interferes with daily life)	3.6	4.1
Schizophrenia	0.5	0.8

Note: Fifty-two percent of subjects indicated more than one psychological problem per parent and/or that both parents had experienced psychological problems.

Table 2

Percentages of Subjects who Indicated that They Had Been Exposed to Various Forms of Abuse or Neglect

Type of Abuse/Neglect	Percent Responding "Yes"
Physical Abuse	7.8
Physical Neglect	2.8
Emotional Abuse	22.7
Emotional Neglect	16.3
Sexual Abuse	3.6
Parent Physically Abused by Partner	5.2
Brother/Sister Physically Abused	5.9
Brother/Sister Sexually Abused	1.8

Note: Fifty-one percent of subjects checked more than one of the above problems.

characteristics of offspring of substance abusers. Differences between groups on the following personality characteristics were investigated: depression-proneness, neuroticism, alexithymia, impulsivity, self-concept, self-esteem, locus of control, self-monitoring, directiveness, need for social support, extroversion, sociability, independence and attachment style.

Subjects were assigned to groups based on their responses to a background information questionnaire, which included questions regarding parental mental health and exposure to abuse/neglect. Berkowitz and Perkins (1990) came to the following conclusion regarding the use of single-item methods for identifying parental alcoholism: "Studies suggest that it is possible to identify most adolescents from alcohol-abusing families by using a single, objective question focusing on the child's perception of the parent's drinking and that this method produces prevalence rates similar to those obtained from more detailed diagnostic instruments such as the CAST (Children of Alcoholics Screening Test) and large-scale national surveys" (1988, p. 207). Based on their conclusions, a single item - "do you suspect that either one of your parents has had or currently has a problem with alcohol or drug abuse?" - was used to identify OSAs in this study.

To identify offspring of parents with other psychological problems, subjects were asked to respond to a checklist of descriptions of various psychological problems by specifying whether they suspected that their mother or father has had or currently has any of the problems listed (see Table 1). Subjects who

indicated that their parent(s) had one or more of these psychological problems and no history of substance abuse fell into the "other psychological problems" classification of the parental mental health dimension, whereas those who indicated parental substance abuse in addition to any type of parental mental illness fell into the "dual diagnosis" classification.

Subjects who had been exposed to abuse/neglect were identified by their responses to a checklist asking them to indicate whether or not they had been physically abused or neglected, emotionally abused or neglected, or sexually abused, and whether or not their parents were abusive to each other or to other children in the family. Subjects who checked one or more of these forms of abuse or neglect were classified as "exposed to abuse/neglect."

Materials

The following self-report measures were administered as dependent variables:

The Eysenck Personality Inventory (EPI; Eysenck & Eysenck, 1963) is a well-known, widely-used, 57-item, true-false instrument which characterizes people along the dimensions of extroversion-introversion and neuroticism-stability. The extroversion dimension has been found to consist of two factors: impulsivity and sociability (Rocklin & Revelle, 1981). Nine-month test-retest reliability coefficients for the EPI ranged from .92 to .94, and split-half reliability coefficients ranged from .86 to .89 (Eysenck & Eysenck, 1963). In addition, the EPI has been shown to have adequate convergent and discriminant validity.

The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) is a 10-item scale which measures feelings of self-worth on a four-point Likert-type scale which ranges from "strongly agree" to "strongly disagree." Test-retest reliability coefficients greater than .80 have been reported for this measure (Rosenberg, 1965).

The Beck Self Concept Test (BST; Beck et al., 1990) is a 25-item instrument which assesses how subjects perceive themselves relative to others on various characteristics (e.g., looks, intelligence, personality). This test uses a five-point Likert-type scale which ranges from "better/less/more than anyone I know" to "worse/more/less than anyone I know," depending on the characteristic. This test has been found to be internally consistent (coefficient alpha of .82), to have adequate test-retest reliability (ranging from .65 to .88) and acceptable convergent and discriminant validity (Beck, et al., 1990).

The Locus of Control Scale (Levenson, 1974) is a 24-item scale which classifies locus of control as internal or external, with two subtests for external locus of control: "belief in chance" and "powerful other". The scale uses a six-point Likert-type scale which ranges from "applies" to "does not apply." Levenson (1974) reported Kuder-Richardson reliability coefficients ranging from .64 to .78, and one-week test-retest reliability coefficients ranging from .64 to .78 for this measure. In addition, the Locus of Control Scale has been shown to have acceptable construct validity (Levenson, 1974).

The Interpersonal Orientation Form (IO Form; Borgatta & Bohrnstedt, 1968) is a 24-item measure including subscales

assessing independence, need for social support, directiveness and sociability. This test uses a four-point Likert-type scale ranging from "definitely does not describe me" to "definitely does describe me." The IO Form has been found to have internal consistency alpha coefficients ranging from .50 to .86 (Borgatta & Bohrnstedt, 1968). Even though some of the reliability coefficients are marginal, this measure was used with the intention of replicating and extending the findings of Berkowitz and Perkins (1988).

The Attachment Style Prototypes Form (ASP; Hazan & Shaver, 1987) is a measure of secure, avoidant and anxious-ambivalent attachment styles. Prototypical descriptions of the different attachment styles are presented and the subject is asked to check the one that best describes him/her and to indicate on a seven-point Likert-type scale the extent to which each of the different attachment styles applies to him/her. This measure was found to have acceptable convergent and discriminant validity, and adequate test-retest reliability for a single-item measure ranging from .48 for secure to .65 for anxious-ambivalent (Levy & Davis, 1988). The Attachment Styles Multi-Item Questionnaire (Hazan & Shaver, 1988) was used as a converging measure. This newly-developed, 13-item measure uses a four-point Likert-type scale which ranges from "strongly disagree" to "strongly agree". Its factors have been labeled discomfort with closeness, concern about insufficient closeness and comfort with closeness; these subscales correspond with the attachment styles: avoidant, anxious-ambivalent and secure,

respectively. The reliability of the multi-item questionnaire has yet to be investigated.

The Self-Monitoring Scale (SM; Snyder, 1974) is a 25-item true-false measure which assesses the tendency for self-observation and self-control in public situations. The SM Scale has been found to have acceptable convergent and discriminant validity, adequate internal consistency (Kuder-Richardson 20 reliability coefficient of .70) and test-retest reliability of .83 (Snyder, 1974).

The Depression Proneness Inventory (DPI; Kayne, et al., 1986) is a 10-item face-valid scale which measures general susceptibility to depression in response to stress. This measure uses a seven-point Likert-type scale with endpoints specific to each question. The DPI was found to have high test-retest reliability ($r=.88$) and good internal consistency with coefficient alphas ranging from .90 to .92 (Kayne, et al., 1986).

The Shalling Sifneos Personality Scale (SSPS; Apfel & Sifneos, 1979) is a measure of alexithymia, a cognitive-affective dimension which is characterized by extreme trouble with knowing and verbally expressing feelings. This 18-item scale uses a four-point Likert-type scale ranging from "does not apply at all" to "applies completely." The SSPS has been found to have high content validity, however the marginal internal consistency (Cronbach's $\alpha = .51$) suggests heterogeneous item content (Norton, 1989). Three subscales from this measure: importance of feelings, difficulty in describing feelings, and preference for taking action over examining thoughts and feelings, were used in this study.

Procedure

After providing informed consent, subjects completed the packet of questionnaires in group testing situations. The questionnaires were in the following order: Eysenck Personality Inventory, Rosenberg Self-Esteem Scale, Beck Self Concept Test, Locus of Control Scale, Interpersonal Orientation Form, Attachment Styles Multi-Item Questionnaire, Attachment Styles Prototypes Form, Self-Monitoring Scale, Depression Proneness Inventory, Shalling Sifneos Personality Scale, and the Background Information Questionnaire. After completing the measures, subjects were debriefed about the purpose of this research and given the opportunity to obtain further information about this and other studies about OSAs.

Data Analyses

The decision to include exposure to abuse/neglect in the factorial design used in this study was based on previous findings suggesting that abuse and neglect are concomitants of parental substance abuse and mental illness (Black et al., 1986; Elliott & Edwards, 1991; Lawson & Wilson, 1980; Russell et al., 1985). In order to assess whether the relationship between parental dysfunction and exposure to abuse/neglect found in other studies also existed in this sample, a Chi-square test of association was conducted first between parental mental health and exposure to abuse/neglect.

In order to examine the independent and combined influences of parental mental health and exposure to abuse/neglect on personality

characteristics of young adults, the dependent variables in the current study were analyzed using the 4 x 2 factorial design. With the exception of impulsivity, the variables examined in the study were grouped into conceptually-related clusters for the data analyses. Impulsivity was examined separately. The affective variables were depression-proneness, neuroticism and alexithymia. Self-esteem, self-concept, locus of control and self-monitoring were included as self-concept variables. Two groups of interpersonal variables were formed based on a priori hypotheses regarding the presence or absence of group differences between OSAs and non-OSAs. No differences between groups were expected for sociability, extroversion, need for social support and directiveness, based on the findings of Berkowitz and Perkins (1988), therefore, these variables were analyzed together. In contrast, group differences were expected for independence and attachment style, based on previous research, so these variables were assessed together. A 4 x 2 analysis of variance (ANOVA) was conducted to examine impulsivity, and 4 x 2 multivariate analyses of variance (MANOVAs) were performed to assess the affective, self-concept and interpersonal variables.¹ Significant main effects and

¹ The MANOVA assumption of moderated correlations among the dependent variables was assessed using Lawley's approximation (Harris, 1985) of Bartlett's sphericity test, revealing statistically significant correlations within the four sets of conceptually related variables: affective variables, $\chi^2 (10) = -396.13$, $p < .01$; self-

interactions were further examined using follow-up ANOVAs and/or *t*-tests.

Two measures of attachment styles were used in the current study: the Attachment Styles Prototypes Form, a categorical measure, and the Attachment Styles Multi-Item Questionnaire, a measure providing subscale scores corresponding to secure, avoidant and anxious-ambivalent attachment styles. The subscales from the multi-item questionnaire were included as the measures of attachment styles in the analyses described above. Data from the Attachment Styles Prototypes Form were assessed using analyses appropriate for categorical data. Chi-square tests of association were conducted between attachment styles and OSA status, and a logistic regression analysis was conducted to predict A/C attachment from parental mental health and exposure to abuse/neglect.

Most studies of offspring of substance abusers have compared OSAs to non-OSAs. In order to contrast the results of the 4 x 2 factorial design used in this study with results obtained by attending only to parental substance abuse, comparisons also were made by first collapsing across levels of exposure to abuse/neglect and then collapsing the parental mental health dimension into two

concept variables, $\chi^2 (15) = -420.51, p < .01$; first group of interpersonal variables, $\chi^2 (6) = -398.93, p < .01$, second group of interpersonal variables, $\chi^2 (6) = -92.72, p < .01$.

groups: OSAs and non-OSAs. Multivariate analyses of variance, using Hotelling's I^2 -test as the criterion, were conducted for the affective, self-concept and interpersonal variables, and significant overall differences were examined by follow-up t -tests. An additional t -test was performed to compare OSAs and non-OSAs on impulsivity. The results obtained when comparing OSAs to non-OSAs are reported after the results for the 4 x 2 factorial analyses for each set of dependent variables; this was done to highlight the similarities and differences in results obtained by the two types of designs.

Finally, previous research has shown that treatment-seeking OSAs are more disturbed than OSAs who do not seek treatment (Baxter, 1989; Hedderick, 1989; Kashubeck & Christensen, 1991). In order to assess whether treatment-seeking subjects in this sample contributed disproportionately to the study's overall results, 4 x 2 MANOVAs for the sets of dependent variables and a 4 x 2 ANOVA for impulsivity were conducted examining only those subjects who had not sought treatment. Although this question ideally would be assessed using a 4 x 2 x 2 (parental mental health X exposure to abuse/neglect X treatment) factorial design, this was not possible with these data due to inadequate cell sizes in the treatment cells. However, the numbers of subjects in the no-treatment cells were adequate for the simple effects analyses conducted.

In the current study, subjects with missing data were excluded from the analyses if they skipped more than 20% of the items for a

given subscale.¹ For subjects who skipped less than 20% of the items for a subscale, a subscale score was calculated by averaging the responses given. The averaged subscale scores were then transformed into standardized scores by subtracting the subjects' scores from the grand mean for the subscale and then dividing by the standard deviation for the subscale. Thus, mean standardized scores for each dependent measure will be reported.

¹The number of subjects dropped due to missing data was 18 in the analysis of affective variables, 6 in the analysis of impulsivity, 11 in the analysis of self-concept variables, 11 in the analysis of the first group of interpersonal variables and 9 in analysis for the second group of interpersonal variables.

CHAPTER III

RESULTS

Parental Dsyfunction and Exposure to Abuse/Neglect

The Chi-square test of association conducted between parental mental health and exposure to abuse/neglect revealed a significant association between parental mental health and exposure to abuse/neglect, $\chi^2 (3) = 48.33, p < .0001$. Reports of exposure to abuse/neglect were higher among subjects who indicated that their parents had substance abuse and/or mental health problems. Twenty percent of subjects whose parents had no known psychological problems reported having been exposed to abuse/neglect, whereas 53% of subjects with substance abusing parents, 39% of subjects whose parents had other psychological problems, and 65% of subjects with dually-diagnosed parents reported exposure to abuse/neglect. This finding supports previous results which indicate that abuse and neglect are concomitants of parental substance abuse and mental illness. In the analyses that follow, the independent effects of parental mental health and exposure to abuse/neglect will be assessed.

Affective Variables

A 4 x 2 MANOVA including neuroticism, depression-proneness, and alexithymia revealed a significant main effect of exposure to abuse/neglect, $F (5, 357) = 2.78, p < .05$. ANOVAs conducted for each dependent variable found significant differences between subjects

who had and had not been exposed to abuse/neglect for depression-proneness, $E(1, 361) = 11.74$, $p < .001$, and neuroticism, $E(1, 361) = 8.82$, $p < .01$. Subjects who had been exposed to abuse/neglect were significantly more likely to present high levels of neuroticism and prone to depression than those who had not been exposed to abuse/neglect. No significant differences were observed for alexithymia. Table 3 presents the standard score means for the affective variables as a function of exposure to abuse/neglect. There was no significant effect of the parental mental health variable, $E(15, 986) = 1.07$, ns, and no interaction between exposure to abuse/neglect and parental mental health, $E(15, 986) = 0.56$, ns, for the affective variables.

The MANOVA comparing OSAs and non-OSAs on the affective variables also revealed a significant overall difference between groups, $F^2(5, 381) = 2.69$, $p < .05$. Follow-up Bonferroni-adjusted t -tests revealed significant differences between OSAs and non-OSAs for neuroticism, $t(385) = -2.98$, $p < .01$, and depression-proneness, $t(376) = -2.01$, $p < .05$. Offspring of substance abusers were found to be significantly more neurotic ($M = 0.25$) and prone to depression ($M = 0.32$) than non-OSAs (neuroticism: $M = 0.01$; depression-proneness: $M = -0.02$). These results support previous findings showing OSAs to be more neurotic and prone to depression than non-OSAs, however, the earlier results for the parental mental health X exposure to abuse/neglect MANOVA demonstrate that this difference actually is related to exposure to abuse/neglect rather than to parental substance abuse.

Table 3

Affective Variables as a Function of Exposure to Abuse/Neglect

	Exposed to Abuse/Neglect	Not Exposed to Abuse/Neglect
<hr/>		
Affective Variable		
<hr/>		
Depression-Proneness**	0.43	-0.16
Neuroticism*	0.39	-0.12
Alexithymia:		
Importance of Feelings	-0.07	0.09
Difficulty in Describing Feelings	0.14	-0.07
Preference for Taking Action	-0.19	0.05
<hr/>		

* $p < .01$. ** $p < .001$.

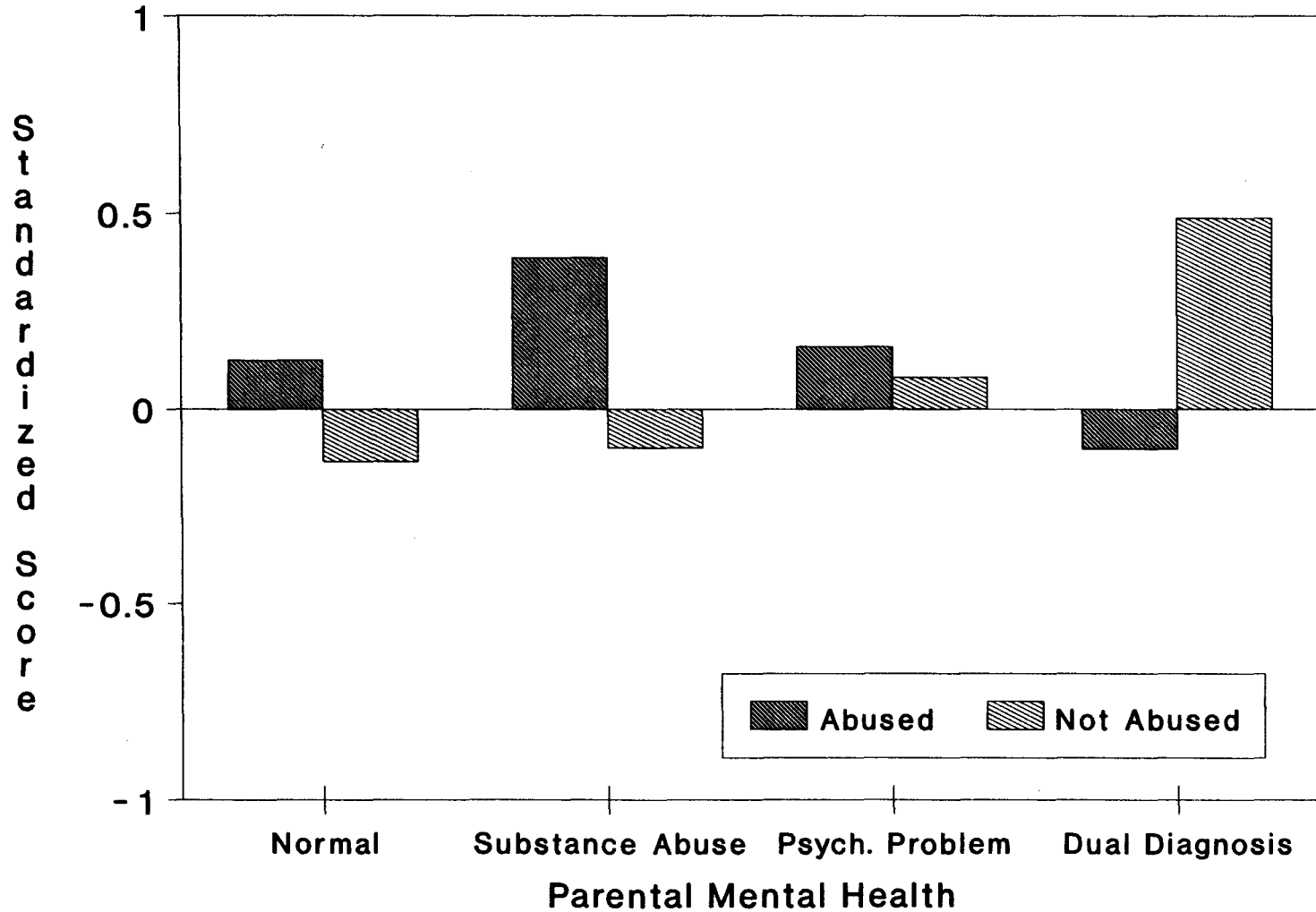
Impulsivity

A 4 x 2 ANOVA examining impulsivity, as measured by the Eysenck Personality Inventory, revealed a significant interaction between parental mental health and exposure to abuse/neglect, $F(3, 373) = 2.90$, $p < .05$. Subjects who fell into the dual diagnosis - not exposed to abuse/neglect classification were found to be the most impulsive, while subjects in the no known psychological problems - not exposed to abuse/neglect classification were found to be the least impulsive. Figure 1 displays the standard score means for impulsivity as a function of parental mental health and exposure to abuse/neglect. There were no significant main effects for impulsivity (parental mental health, $F(3, 373) = 0.62$, ns; exposure to abuse/ neglect, $F(1, 373) = 0.20$, ns). Furthermore, the t -test conducted to compare OSAs and non-OSAs on impulsivity found no significant differences between groups, $t(381) = -1.16$, ns. The finding of no differences in impulsivity between OSAs and non-OSAs replicates the results of previous studies. However, results for impulsivity from the 4 x 2 design indicate that more subtle group differences in the form of a parental mental health X exposure to abuse/neglect interaction existed in the current sample.

Self-Concept Variables

The 4 x 2 MANOVA conducted to examine self-esteem, self-concept, locus of control and self-monitoring variables revealed a trend toward a main effect of exposure to abuse/neglect, $F(6, 361) = 1.85$, $p < .10$. For the sake of providing direction for future

Figure 1: Impulsivity as a Function of Parental Mental Health and Exposure to Abuse/Neglect



research, this trend, while not reaching conventionally accepted levels of significance, was explored post hoc by conducting ANOVAs for each dependent variable. Significant differences were found between those who had and had not been exposed to abuse/neglect in self-esteem, $E(1, 366) = 4.55, p < .05$, and self-concept, $E(1, 366) = 6.37, p < .05$; and a trend toward a difference between groups was found for locus of control (internal), $E(1, 366) = 3.58, p < .07$. Subjects who had been exposed to abuse/neglect had lower self-esteem, a more negative self-concept, and a greater internal locus of control than subjects who had not been exposed to abuse/neglect. Table 4 presents the standard score means for the self-concept variables as a function of exposure to abuse/neglect. There was no significant effect of the parental mental health variable, $E(18, 1022) = 1.42, ns$, and no interaction between exposure to abuse/neglect and parental mental health, $E(18, 1022) = 1.01, ns$, for the self-concept variables. Furthermore, when the OSA/non-OSA classification was used, no significant differences between groups were observed for the self-concept variables, $E(6, 380) = 0.80, ns$. These results contrast with previous findings of differences between OSAs and non-OSAs on self-concept variables, and suggest that characteristics such as low self-esteem, negative self-concept and internal locus of control may be related to exposure to abuse/neglect rather than to parental substance abuse.

Table 4

Self-Concept Variables as a Function of Exposure to Abuse/Neglect

	Exposed to Abuse/Neglect	Not Exposed to Abuse/Neglect
Self-Concept Variable		
Self-Esteem*	-0.21	0.13
Self-Concept*	-0.17	0.10
Locus of Control:		
Internal	0.14	-0.10
Powerful Other	-0.01	0.02
Belief in Chance	-0.05	0.04
Self-Monitoring	-0.02	0.03

* $p < .05$.

Interpersonal Variables

As expected, based on previous research, the 4 x 2 MANOVA which examined sociability, extroversion, directiveness and need for social support revealed no significant effect of parental mental health, $E(12, 966) = 0.92$, ns, no effect of exposure to abuse/neglect, $E(4, 365) = 0.99$, ns, and no interaction between exposure to abuse/neglect and parental mental health, $E(12, 966) = 1.09$, ns. Also, the MANOVA which compared OSAs and non-OSAs on these variables found no significant differences, $E(4, 382) = 0.34$, ns. These results replicate and extend the Berkowitz and Perkins (1988) findings of no group differences for these variables.

In contrast, the 4 x 2 MANOVA which examined independence, discomfort with closeness, concerns about insufficient closeness and comfort with closeness revealed a significant main effect of parental mental health, $E(12, 966) = 2.20$, $p < .05$. ANOVAs conducted for each of the dependent variables found significant differences between parental mental health groups for independence, $E(3, 368) = 4.68$, $p < .005$, but not for the remaining interpersonal variables. Post hoc analyses using Bonferroni adjusted alpha for pairwise t -tests revealed no significant differences for the independence variable between the normal group, the substance abuse group and the other psychological problems group. However, significant differences were found between the dual diagnosis group and the normal group, $t(139) = -4.58$, $p < .001$, the substance abuse group, $t(61) = -3.82$, $p < .01$, and the other psychological problems

group, $t(141) = -3.16$, $p < .05$. Table 5 displays the standard score means for independence and the attachment styles variables as a function of parental mental health. There was no effect of the exposure to abuse/neglect variable, $F(4, 365) = 0.94$, ns, and no interaction between parental mental health and exposure to abuse/neglect, $F(12, 966) = 0.96$, ns, for this group of interpersonal variables.

The MANOVA comparing OSAs and non-OSAs on independence and attachment styles found a trend toward significant differences between OSAs and non-OSAs, $F(4, 382) = 1.98$, $p < .10$. This trend was explored post hoc to provide direction for future research and to determine if previous results using the OSA/non-OSA distinction were replicated. Follow-up Bonferroni-adjusted t -tests conducted for each dependent variable revealed significant differences between OSAs and non-OSAs for independence, $t(385) = -2.28$, $p < .05$, as well as a trend toward a significant difference between groups for comfort with closeness, $t(382) = 1.74$, $p < .09$. Offspring of substance abusers were more independent ($M = 0.20$) and less comfortable with closeness ($M = -0.14$) than non-OSAs (independence: $M = -0.06$; comfort with closeness: $M = 0.06$).

These results replicate the previous finding that OSAs are more independent than non-OSAs, however a finer-grained analysis using the 4 x 2 classification revealed that, in the current sample, this difference in independence can be attributed to subjects in the dual diagnosis classification. Regarding attachment style, none of Hazan and Shaver's (1987) three attachment styles: secure, avoidant

Table 5

Interpersonal Variables as a Function of Parental Mental Health

Interpersonal Variable	Parental Mental Health			
	Normal	Substance Abuse	Psychological Problem(s)	Dual Diagnosis
Independence*	-0.11 ^a	-0.24 ^b	0.02 ^c	0.47 ^{a,b,c}
Attachment Styles:				
Discomfort with Closeness	-0.07	-0.13	-0.07	0.35
Concerns about Insufficient Closeness	-0.10	-0.11	0.19	0.10
Comfort with Closeness	0.04	0.15	0.10	-0.29

* $p < .005$. ^a Groups sharing this superscript differ at $p < .001$. ^b Groups sharing this superscript differ at $p < .01$. ^c Groups sharing this superscript differ at $p < .05$.

and anxious-ambivalent, were found to differentiate groups reliably. This finding is consistent with the hypothesis that the attachment style of offspring of disturbed or abusive caretakers will not be adequately described by any one of these styles alone (Crittenden, 1988).

Attachment Style Prototypes

As an additional measure of attachment style, the A/C attachment style was assessed by replicating the procedure used by Latty-Mann and Davis (1988) and Brennan et al. (1991). Subjects were divided based on A/C status: subjects fell into the A/C classification if they rated the anxious-ambivalent and avoidant attachment styles as "4" ("somewhat like me") or higher, and the secure style as less than "4" on the Attachment Style Prototypes Form. Twelve percent of subjects in the current sample were classified as A/C and 87% fell into the non-A/C classification.¹ A Chi-square test of association revealed a significant relationship between A/C attachment and parental substance abuse (OSA, non-OSA), $\chi^2 (1) = 6.84, p < .01$, with OSAs reporting A/C attachment significantly more often than would be expected by chance.

In order to assess the hypothesis that OSAs are best characterized as avoidant and anxious-ambivalent (A/C), rather than

¹ The percentage of A/C's in this sample is somewhat lower than in Brennan et al.'s (1991) sample. That may be because this study used an added criteria for A/C classification: subjects had to score lower than 4 for secure attachment.

either avoidant or anxious-ambivalent (Crittenden, 1988), attachment style was further differentiated into secure, avoidant, anxious-ambivalent and A/C. Subjects who rated either the secure, avoidant or anxious-ambivalent style as "4" or higher while rating the other two styles as less than "4" were classified as secure, avoidant or anxious-ambivalent, respectively. A statistical trend toward a significant association between attachment style and parental substance abuse was revealed, $\chi^2 (4) = 8.51, p < .08$. Table 6 presents the observed and expected frequencies of the various attachment styles for OSAs and non-OSAs. The observed frequencies did not differ significantly from what was expected for anxious-ambivalent and avoidant attachment styles, however, more OSAs than would be expected by chance fell into the A/C classification.

Finally, in order to examine further the finding of an association between A/C attachment and OSA status, a logistic regression was conducted to predict A/C attachment from parental mental health and exposure to abuse/neglect. The logistic regression revealed a trend toward the main effect of parental mental health making a significant contribution to the prediction of A/C attachment, $\chi^2 (3) = 6.51, p < .10$. No additional improvement in prediction was made by including the effect of exposure to abuse/neglect, $\chi^2 (1) = 0.09, ns$, or the interaction term, $\chi^2 (3) = 5.12, ns$. The resulting equation correctly classified only 10% of subjects endorsing A/C attachment. These results regarding attachment styles replicate and extend previous findings indicating that OSAs are more likely to endorse the A/C attachment style than

Table 6

Observed and Expected (in parentheses) Frequencies of Attachment Styles for OSAs and non-OSAs

	OSAs	non-OSAs
Attachment Style		
Secure	19 (24.8)	78 (72.2)
A/C	20 (12.5)	29 (36.5)
Avoidant	14 (13.0)	37 (38.0)
Anxious-Ambivalent	3 (4.3)	14 (12.6)

would be expected by chance. However, contrary to what would be expected based on Crittenden's (1988) findings, A/C attachment could not be predicted by parental mental health or exposure to abuse/neglect.

Treatment-Seeking Subjects

The 4 x 2 MANOVAs (affective, self-concept and interpersonal variables) and ANOVA (impulsivity) examining only those subjects who had not sought treatment revealed that some of the effects reported above dropped out when examining no-treatment subjects only: There was no effect of exposure to abuse/neglect for affective variables, $E(5, 349) = 1.59$, ns, and no effect of exposure to abuse/neglect for self-concept variables, $E(6, 353) = 1.47$, ns. The effect of parental mental health for the second group of interpersonal variables remained significant for no-treatment subjects, $E(12, 945) = 2.21$, $p < .01$; this was driven by the significant differences between groups for independence, $E(3, 360) = 3.99$, $p < .01$. Also, the interaction between parental mental health and exposure to abuse/neglect for impulsivity maintained its statistical significance when examining no-treatment subjects only, $E(3, 365) = 3.46$, $p < .05$; however, a different pattern of results emerged for these subjects than what was found for the overall sample. Of the no-treatment subjects, subjects who fell into the substance abuse - exposed to abuse/neglect classification were found to be the most impulsive (in contrast to the dual diagnosis - not exposed to abuse/neglect group in the overall sample), and subjects in the dual diagnosis - exposed to abuse/neglect

classification were found to be the least impulsive (in contrast to the no history of psychological problems - no exposure to abuse/neglect group in the overall sample). Table 7 presents the standard score means for impulsivity as a function of parental mental health and exposure to abuse/neglect for no-treatment and treatment-seeking subjects.

These results reveal that when treatment-seeking subjects were excluded from the analyses, the earlier findings indicating greater disturbance in subjects exposed to abuse/neglect were diminished. Furthermore, the pattern of results for impulsivity changed substantially when examining no-treatment subjects only. These findings highlight the importance of future studies of OSAs examining both treatment-seeking and non-treatment-seeking subjects.

Table 7

Impulsivity as a Function of Parental Mental Health and Exposure to Abuse/Neglect for No-Treatment and Treatment-Seeking Subjects

	Exposed to Abuse/Neglect	Not Exposed to Abuse/Neglect
Parental Mental Health		
No-Treatment Subjects		
No Known Psychological Problems	0.13	-0.16
Substance Abuse	0.66	-0.16
Other Psychological Problem(s)	0.35	0.01
Dual Diagnosis	-0.30	0.40
Treatment-Seeking Subjects		
No Known Psychological Problems	0.09 ^a	0.16
Substance Abuse	0.02 ^a	0.71 ^a
Other Psychological Problem(s)	-0.04	0.38
Dual Diagnosis	0.17	0.71 ^a

^a $n < 10$.

CHAPTER IV

DISCUSSION

The current study sought to investigate personality characteristics of young adults in relation to parental mental health and exposure to abuse/neglect. In order to isolate the independent effects of parental substance abuse, a parental mental health dimension was formed by including normal, psychiatric and comorbid comparison groups. Exposure to abuse/neglect was used as a second grouping dimension in order to gain further understanding of this concomitant of parental substance abuse as an independent contributor to psychological disturbance in offspring. The significant association found in the current sample between exposure to abuse/neglect and parental dysfunction is consistent with findings of previous studies (Black et al., 1986; Elliott & Edwards, 1991; Lawson & Wilson, 1980; McCarthy-Woods, 1988; Sowder & Burt, 1980; Woodside, 1991). Despite the association between these variables, the factorial design used in this study allowed for the examination of the independent and combined influences of parental mental health and exposure to abuse/neglect.

Affective Variables

The results of the current study replicate previous findings that offspring of substance abusers are significantly more neurotic and prone to depression than non-OSAs (Benson & Heller, 1987; Black et al., 1986; Clair & Genest, 1987; Sher et al., 1991; Tweed & Ryff,

1991). However, the parental mental health by exposure to abuse/neglect factorial design used in this study revealed that depression-proneness and neuroticism were actually related to exposure to abuse/neglect, rather than to parental substance abuse or mental illness. These results extend previous findings and were consistent with the results of Elliott and Edwards' (1991) study: the main effect of parental mental health on offsprings' psychological distress in their sample was eliminated when history of sexual or physical abuse was controlled. Elliott and Edwards (1991) concluded that "the lasting traumatic symptoms in [offspring of alcoholic and mentally ill parents], while present, appear to be more related to a history of either physical or sexual abuse, rather than uniquely related to the alcoholism or mental illness of the parent" (p. 14). The findings of the current study provide further support for this conclusion. In addition, the results of this study suggest a potential relationship of depression-proneness and neuroticism to emotional abuse and neglect, as the majority of subjects who fell into the exposed to abuse/neglect classification reported that they had been emotionally abused and/or neglected in their family of origin (see Table 2).

Regarding alexithymia, no significant differences were found when OSAs were compared to non-OSAs or when the 4 x 2 grouping structure was used. These findings replicate and extend Sher et al.'s (1991) results for alexithymia, and further challenge the findings of Black et al. (1986) that offspring of substance abusers have more

difficulty than non-OSAs in identifying and expressing their emotions.

In summary, parental substance abuse was not found to be significantly related to any of the affective variables examined, nor was parental mental illness. Instead, emotional distress (i.e., depression-proneness and neuroticism) was found to be significantly related to having been raised in an environment of abuse and/or neglect.

Impulsivity

Previous findings regarding impulsivity by Berkowitz and Perkins (1988) and Sher et al. (1991) were replicated in the current study, as no significant differences were found between OSAs and non-OSAs in impulsivity. However, more subtle differences emerged with the use of the 4 x 2 factorial design. Subjects in the dual diagnosis - not exposed to abuse/neglect group were found to be the most impulsive. Further research is needed to examine impulsivity as a function of parental mental health and family environment variables. Such studies should be sure to include both treatment-seeking and non-treatment-seeking subjects, as these two groups showed different patterns of impulsivity in the current study.

Self-Concept Variables

No significant differences were found between OSAs and non-OSAs in self-esteem, self-concept, locus of control or self-monitoring. These results support previous findings of no group differences for self-esteem, locus of control and self-consciousness (Churchill et al., 1990; Duprez, 1987; Sher et al.,

1991; Tweed & Ryff, 1991; Werner & Broida, 1991). However, the use of the 4 x 2 factorial design revealed a trend toward a main effect of exposure to abuse/neglect.¹ Post hoc exploration revealed that subjects who had been exposed to abuse/neglect had lower self-esteem and a more negative self-concept than subjects who had not been exposed to abuse/neglect. These results are similar to the findings of Werner and Broida (1991), who found that self-esteem was related to familial dysfunction rather than to parental substance abuse.

Interpersonal Variables

No significant differences between OSAs and non-OSAs were found for sociability, extroversion, need for social support or directiveness. These results replicate Berkowitz and Perkins' (1988) findings of no group differences. In addition, their results for these variables were extended by the current study's finding of no differences between groups using the 4 x 2 factorial structure.

The finding that OSAs and non-OSAs differed somewhat in independence supports the similar finding by Berkowitz and Perkins (1988). Furthermore, the results of the 4 x 2 MANOVA extended their finding by showing that it was subjects in the comorbid group who were more independent than their peers, including OSAs who

¹ Failure to find a significant effect of exposure to abuse/neglect for the self-concept variables may have been due to lack of power. While the test would have detected a medium-sized effect 99% of the time, it could have detected a small effect only 23% of the time.

have not been exposed to other forms of parental psychopathology. These findings suggest that the differences in independence between OSAs and non-OSAs reported by Berkowitz and Perkins (1988) may have been influenced by the comorbidity of substance abuse and other psychological problems, and cannot be attributed specifically to parental substance abuse.

Attachment Style

The current study found a significant association between A/C attachment and OSA status. Offspring of substance abusers were more likely to endorse A/C attachment than would be expected by chance. This result replicates the findings of Latty-Mann and Davis (1988) and Brennan et al. (1991). Furthermore, their results are extended by the finding that no relationship was found between OSA status and anxious-ambivalent or avoidant attachment styles, as would be predicted based on Crittenden's (1988) suggestion that the attachment style of offspring of disturbed or abusive parents is not adequately described as avoidant or anxious-ambivalent. The 4 x 2 MANOVA which examined comfort with closeness, discomfort with closeness and concern about insufficient closeness (the multi-item subscales corresponding to secure, avoidant and anxious-ambivalent attachment, respectively) found no significant differences between groups; this also supports the hypothesis based on Crittenden's (1988) findings. However, the logistic regression analysis attempting to predict A/C attachment from parental mental health and exposure to abuse/neglect revealed only a trend toward a significant main effect of parental mental health, and the resulting

equation was not useful for predicting A/C attachment, as it classified only 10% of the subjects endorsing A/C attachment correctly.

Further research is required to gain a better understanding of attachment styles as they relate to parental dysfunction (i.e., substance abuse, mental illness) and exposure to abuse/neglect. Also, more information is needed about the reliability and validity of the attachment style measures used in the current study.

Limitations

Several limitations of the current study should be acknowledged. First, the reliance on retrospective self-report data for assigning subjects to groups is not ideal. The use of offspring of parents who have been clinically diagnosed would have been preferable, however such samples are difficult to obtain outside of a treatment-seeking population. One possible strategy would be to select randomly some percentage of subjects from the questionnaire sample for in-depth interviews regarding their family background. Equally problematic is the reliance on retrospective self-report data for information about exposure to abuse/neglect. It could be argued that subjects who are more disturbed would be more likely to claim, perhaps erroneously, that they have been exposed to abuse/neglect.

Another weakness of this study is the use of young adults sampled from a college population. Such a sample may over-represent higher-functioning individuals and could lead to spurious findings of no group differences (Sher et al., 1991). However, the fact that 20% of the subjects in the current sample have sought

treatment provides some evidence that more distressed individuals were represented. Furthermore, some of the effects found for the whole sample dropped out when examining only the subjects who have not sought treatment. This suggests that the treatment-seeking (i.e., more disturbed) subjects in this sample did influence the overall findings of group differences observed in the study.

A third limitation of this study is that several types of parental psychopathology and forms of abuse and neglect were lumped together when subjects were classified into groups. It was necessary to do this in the current study in order to obtain the cell sizes needed to provide adequate power for the detection of medium-sized effects. However, future research is needed to make specific comparisons between parental substance abuse and other disorders, as well as to examine the specific effects of various forms of abuse and neglect. In addition, future studies should consider dividing the comorbid group to compare subjects with two impaired parents to subjects with one dually-diagnosed parent and one unimpaired parent.

Finally, the design used in the current study does not take severity of parental dysfunction into account. Thus, a confound may exist between severity of parental substance abuse/mental illness and exposure to abuse/neglect (i.e., more serious substance abusers may be more likely to abuse and/or neglect). This hypothesis remains unexamined in this study, however it is an important one to consider in future research.

In conclusion, the current study, while limited, attempted to add to the recent research trend of examining offspring of substance abusers in relation to family environment variables. This was done by further isolating the variable of parental substance abuse and including additional comparison groups. The findings of this study support the conclusion that offspring adjustment is related less to the parental substance abuse or mental illness itself than to the environmental/relational concomitants (such as abuse and neglect) of such parental dysfunction.

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The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Masters of Arts.

October 12, 1992
Date


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